

# STATEMENT OF PRINCIPLES OF CALIFORNIA FLOOD MANAGEMENT AND FLOODPLAIN RESTORATION

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Friends of the River

Friends of the Santa Clara River

Golden Gate Audubon Society

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League of Women Voters of California

National Audubon Society, California

Natural Heritage Institute

Pacific Coast Federation of Fishermen's Associations

Sierra Club

The Bay Institute of San Francisco

Tuolumne River Trust

United Anglers

*"I think we should turn flood control on its head...the way to reduce flooding in one area is to promote flooding in others. For political, economic and environmental reasons, the traditional approach of raising levees and building dams is simply no longer viable. Store floods on the floodplains. That's the way the rivers do it, and we should follow their lead."*

- Dr. Jeffrey F. Mount: California Rivers and Streams: The Conflict Between Fluvial Process and Land Use

*"Ten thousand river commissions, with the mines of the world at their back, cannot tame that lawless stream, cannot curb it or confine it, cannot say to it 'Go Here' or 'Go There', and make it obey; cannot save a shore which it has sentenced; cannot bar its path with an obstruction which it will not tear down, dance over and laugh at..."*

- Mark Twain: Life on the Mississippi

For more information or to obtain extra copies of this document, please call Jackie McCort or Jenna Olsen at the Sierra Club, 510/654-7847.

The tragic 1997 California floods killed 8 people, damaged or destroyed almost 20,000 homes and have been estimated to cost more than \$1.8 billion in property damage.

It's time for a change. Building big new expensive dams and levees isn't the answer. California needs a comprehensive flood management strategy that will minimize loss of life and property, save taxpayer dollars and protect and restore important and valued natural environments and landscapes. A recent Field Poll reveals there is a widespread endorsement of levee set-backs and the placement of greater restrictions on future residential building in floodplains--the public is ready to embrace environmentally-sound flood management practices.

Floods are part of the dynamic nature of healthy rivers. In fact, floods and high flows are needed to cleanse rivers of accumulated debris, build streambanks, import gravel for salmon and steelhead spawning, thin riparian forests and create riverine habitats. By working with nature--instead of against it by relying solely on building big new expensive infrastructure such as dams and levees--we create the opportunity to develop solutions of mutual benefit that improve flood management, water quality and the health of ecosystems and the economy.

Our general principles of flood management and floodplain restoration, based on the most current scientific understanding of riverine processes and the hard lessons of repeated flooding in California and other parts of the country, most notably the Upper Mississippi Basin, are:

**1. Restore river systems and functions that improve flood management while also bolstering the effectiveness of existing flood control systems:**

- a. Restore to a meaningful extent the historical capacity of rivers and their floodplains to better accommodate flood waters by setting back levees to widen the floodway--the river channel during high flows.
- b. Increase wetland and riverside forest habitat within the widened river zone.
- c. Increase the use of planned floodplain flooding to reduce downstream flood peaks.
- d. Strengthen existing and properly sited levees at high risk, which protect high value floodplain uses that cannot be relocated from the floodplain.
- e. Reassess the operations of reservoirs and waterworks to ensure the efficient, reliable and prudent use of flood control space. In some cases, dams and waterworks need to be structurally modified to improve their ability to release water to avoid downstream flooding.
- f. Improve use of weather forecasting and monitoring upstream conditions to have a better "early warning system" of when a flood could be coming.

**2. Better manage the uses of floodplains to minimize taxpayer expense and maximize environmental health:**

- a. Eliminate incentives or subsidies for development in the most dangerous parts of the floodplain. No more people should be put in harm's way.
  - b. Reform floodplain mapping programs so that they accurately portray the risks and consequences of anticipated flooding. Ensure that Californians understand when they are locating in a floodplain.
  - c. Ensure that new structures unavoidably being built in floodplains are designed to resist damage from foreseeable future floods.
  - d. Educate Californians on the risks of living, working, or farming in areas prone to floods--and make sure they are willing to bear the appropriate financial responsibility for such use.
  - e. Endeavor to relocate the most threatened Californians and communities who volunteer to move to safer locations.
  - f. Ensure that state and local governments responsible for floodplain land use decisions bear an increased financial responsibility for flood recovery efforts.
3. Manage the entire watershed to provide the most protection from floods in an environmentally-sensitive way:
- a. Discourage development in remaining wetlands and floodplains. Wetlands and functioning floodplains act as giant sponges which absorb and slow the progress of floodwaters.
  - b. Use acquisition and easement programs to restore some of California's historical wetlands and floodplain acreage and to promote functional restoration of associated river systems.
  - c. Discourage clearcutting and roadbuilding in areas prone to mudslides.
  - d. Where possible, replace non-native hillside annual vegetation with native perennials to improve rainwater absorption and reduce hillside erosion.
4. Existing state and federal laws that protect endangered species are not responsible for delays in immediate levee repair. Attempts to weaken or suspend existing endangered species laws only divert energy away from the true causes of repeated flooding losses. Rather than scapegoating these laws, **comprehensive efforts** should be made to restore natural floodplain habitat and associated hydrologic functions to levels that take significant pressure off the crucial but minimum habitats available today.
5. State, local and federal agencies and governments, non-governmental stakeholders, and concerned members of the public need to work cooperatively to develop and implement better short-term flood response coordination and funding. The implementation of more innovative and comprehensive long-term alternatives (undertaken in conjunction with near-term spending) should be facilitated and leveraged.